NONPOINT SOURCE FIVE-YEAR IMPLEMENTATION PLAN - INTRODUCTION AND OVERVIEW

A. INTRODUCTION

In 1998, the State of California began the implementation of its Fifteen-Year Program Strategy (Strategy) for the Nonpoint Source Pollution Control Program (NPS Program), as delineated in the *Plan for California's Nonpoint Source Pollution Control Program* (NPS Program Plan). The Strategy described the vision and goals of the NPS Program, including the basic NPS Program process elements of planning, coordination, implementation, monitoring and tracking, and assessment and reporting of NPS Program activities. The NPS Program Plan also divided the fifteen-year Strategy into three, five-year implementation periods, with direction towards achieving the goals and objectives of the NPS Program, culminating in complete management measure (MM) implementation by the year 2013.

The first five-year implementation plan was developed by the State Water Resources Control Board (SWRCB), the Regional Water Quality Control Boards (RWQCBs), and the California Coastal Commission (CCC) as part of the NPS Program Plan. This implementation plan focused on the activities of the SWRCB, RWQCBs, and the CCC. The inclusion of activities of other State agencies with NPS related authorities and responsibilities began with the Interagency Coordinating Committee (IACC) in 2001, already three years into the five-year implementation period. The IACC agencies involved in that process submitted to the SWRCB their tabulated list of activities that could be included in *the Second Addendum to the First, Five-Year NPS Implementation Plan* (Second Addendum). The Second Addendum was completed in September 2001, less that 18 months prior to beginning development of this document. Although this proved to be an important beginning to the cooperative process which is now being developed more fully, the timing created an abbreviated period during which the participating agencies could work through their NPS-related activities, incorporate collaborative processes with other agencies, or otherwise adjust activities and develop improvements.

The process of developing the *NPS Program Five-Year Implementation Plan (2003-2008)* (NPS Implementation Plan) began in February 2002, and included the consideration of what had been accomplished thus far in the first, five-year period. Other than the ability to begin the planning process before the implementation period actually began, there were several additional changes that took place in this process. They included:

1. The development of NPS Implementation Plan Objectives, which were drafted through the IACC subcommittees for the six NPS land use categories. This was a significant effort at collaboration that had not taken place during the development of the Second Addendum.

2. The consideration of "performance measures" that could be utilized to evaluate success in meeting the NPS Implementation Plan Objectives at the end of the second, five-year implementation period. This process also utilized the IACC subcommittee structure.

3. The development of a database for the NPS Implementation Plan to be used by all of the participating IACC agencies. The database includes all of the agency activity information that provided in this document, as well as available fields to be used for contact, funding, location, watershed, pollutant/stressor, deliverables, and other information that will be essential in the development of collaborative processes.

As the State embarks upon the second, five-year implementation period, it is important to consider the original goals of the NPS Program and to re-evaluate them as they pertain to the NPS Implementation Plan. The following section summarizes the NPS Program Goals and identifies objectives for the Five-Year Implementation Plan.

B. NPS PROGRAM GOALS AND FIVE-YEAR IMPLEMENTATION PLAN OBJECTIVES

1. Original NPS Program Strategy Vision and Goals

The NPS Program Plan was developed to focus and expand the State's NPS pollution control efforts for the fifteen year period from 1998 through 2013. The "vision" of the NPS Program is to "…reduce and prevent NPS pollution so that the waters of California support a diversity of biological, educational, recreational, and other beneficial uses." To meet this vision, the NPS Program Plan provided five general goals (focused on the NPS Program process elements) and eleven supporting or more specific goals. The five NPS Program Goals (bold) and eleven supporting goals are provided below:

1) Track, monitor, assess, and report NPS Program activities.

a. Improve monitoring and assessment of State water quality and the effectiveness of management practices (MPs) that are implemented to prevent and control NPS pollution.
b. Ensure consistent, accurate reporting and dissemination of information related to water quality and related environmental data, sources of NPS pollutants, and pollution control and prevention activities.

2) Target NPS Program activities.

a. Manage NPS pollution, where feasible, at the watershed level – including pristine areas and watersheds that contain water bodies on the Clean Water Act (CWA) section 303(d) list – where local stewardship and site-specific MPs can be implemented through comprehensive watershed protection or restoration plans.
b. Apply previous experiences to future decisions (e.g., through the use of pilot projects and the incorporation of "lessons learned").

3) Coordinate with public and private partners in all aspects of the NPS Program.

a. Build the NPS Program upon a foundation of public involvement and support and encourage public participation throughout all stages of the NPS Program.
b. Encourage innovative approaches to NPS pollution control and prevention through interagency, interdisciplinary, and volunteer activities.
c. Strive to make regulatory, planning, and monitoring processes and programs more effective, efficient, and user-friendly and to coordinate related programs to avoid duplication where possible.

4) Provide financial and technical assistance and education.

a. Enhance the leadership roles of the SWRCB, RWQCBs, CCC, and other agencies in providing local governments and the public with technical and financial assistance and educational programs related to NPS pollution control, land use management, and watershed management.
b. Support applied research to expand NPS Program implementation (e.g., development of improved, cost-effective MPs, and environmentally friendly products).

5) Implement MMs and associated MPs.

a. Ensure the protection and restoration of State's water quality, existing and potential beneficial uses, critical coastal areas (CCAs), and pristine areas by implementing MMs to prevent and control NPS pollution. All MMs will be implemented, where needed, by 2013. MMs serve as general goals for the control and prevention of polluted runoff. Site-specific MPs are then used to achieve the goals of each MM.
b. Target implementation of MMs using a combination of non-regulatory activities and enforceable policies and mechanisms with self-determined cooperation preferred over prescriptive measures.

Part of the process that will ensure that the NPS Program Goals are met includes the Strategy and the successive five-year NPS implementation plans. This document is itself is the second of the three Five-Year Plans, for the period 2003-2008. The NPS Implementation Plan includes five-year objectives, which guide the activities that will be taking place during this period and support the goals articulated in the NPS Program Plan.

2. NPS Implementation Plan Objectives

An integral part of the development of the NPS Implementation Plan, was establishing meaningful objectives and associated steps that support the eleven specific goals

presented in the NPS Program Plan. Over a period of approximately one year, the IACC met frequently to develop a series of objectives and supporting steps to satisfy these requirements. Four main objectives were developed for the NPS Implementation Plan along with thirteen specific steps to achieve these objectives. The four main objectives and the thirteen steps (along with their relationship to the NPS Program Goals) are provided below.

1) **Promote the implementation of MMs and related practices by all levels of water quality managers (federal, State, watershed groups, and other stakeholders).**

   Steps for accomplishing this include the following:

   a) Develop a consistent message and informational materials, training and technical advice to support NPS programs and providing these to all levels of government and other stakeholders. *(NPS Program Goals: 1a, 2c, 4a, 4b)*
   b) Invite and encourage participation of federal and local governments in the IACC and subcommittees as appropriate. *(NPS Program Goals: 3a, 3b, 3c, 4a)*
   c) Support the creation of agency policies at all levels of government that implement NPS MMs. *(NPS Program Goals: 3b,4a, 4b, 5a, 5b)*
   d) Provide a mechanism(s) to simplify the process of distributing information regarding the NPS Program, MMs, monitoring results, and other NPS program technical information. *(NPS Program Goals: 1a, 1b, 3a, 3c, 4a)*
   e) Develop a tracking mechanism(s) for MM and MP effectiveness that can be used by and shared with other agencies and the public. *(NPS Program Goals: 1a, 1b, 3c)*

2) **Preserve water quality in water bodies that are currently meeting California water quality standards and protect them from future degradation from the impacts of nonpoint source pollution.**

   Steps for accomplishing this include the following:

   a) Adopt and enforce additional agency policies to implement MMs in water bodies that are currently meeting California water quality standards and to protect them from further degradation from the impacts of nonpoint source pollution. *(NPS Program Goals: 2a, 3c, 4a, 5b)*
   b) Define or refine criteria for watershed management plans and/or local coastal plans that will successfully address NPS pollution for all waters. *(NPS Program Goals: 1a, 1b, 2a, 4a, 5b)*
   c) Encourage development and implementation of watershed management plans for all waters of the state at a scale appropriate to implement MMs and MPs. *(NPS Program Goals: 2a, 3a, 3c, 4a)*

3) **Promote the implementation of MMs and use of MPs for the NPS component of total maximum daily loads (TMDLs) or in CWA section 303(d) listed water bodies in order to improve water quality.**

Steps for which include the following:

a) Ensure that the NPS components of the TMDL implementation plan are accounted for in five-year NPS plans of State agencies as appropriate. *(NPS Program Goals: 1b, 2a, 3c, 5a, 5b)*
b) Coordinate with the TMDL program and Regional Board NPS Staff to determine implementation and effectiveness of MMs and MPs. *(NPS Program Goals: 1a, 1b)*

4) Promote better leverage of inter-agency and private entity resources for NPS Programs.

Steps for which include the following

a) Continue with periodic IACC meetings and other interagency coordination efforts.
(NPS Program Goals: 2a, 3b, 3c, 4a)
b) Seek additional collaborative interagency efforts for NPS pollution prevention. *(NPS Program Goals: 2a, 3b, 3c, 4a)*
c) Complete a strategic plan for NPS Program that will include a report on the extent of implementation already accomplished (as of 2003), an assessment of what remains to be accomplished and a defined approach to achieve it. *(NPS Program Goals: 1a, 2a, 2b, 3a, 3b, 3c, 4a)*

In addition to the overall NPS Implementation Plan Objectives, the IACC developed specific objectives for each NPS land use category. These 'NPS Category Objectives' are supportive of the overall NPS Implementation Plan Objectives, as well as of the NPS Program Goals. The purpose of the NPS Category Objectives development effort was to provide objectives that have targeted and measurable results and to ensure that all land use categories and all MMs are included in the implementation process. These objectives will be utilized to guide implementation plan activities and evaluate the State's performance in achieving the NPS Implementation Plan Objectives.

The NPS Category Objectives will be reviewed and refined throughout the five-year implementation period. This effort will take place in order to continually align them more specifically to address actual water quality effects and changes, such as de-listing of impaired water bodies or with indicators of preservation of high quality water bodies.

C. NPS PROGRAM ASSURANCE

There are a several major activities that are taking place in the California that will help ensure that the NPS Program Vision and Goals can be met. Some of these activities are specific to the NPS Program, for which the SWRCB is solely responsible, and still more take a broader approach and utilize a multi-agency mechanism to address NPS pollution control.

These activities include:

1. The NPS Implementation and Enforcement Policy

The *Policy for Implementation and Enforcement of NPS Pollution Control Program* (NPS Implementation and Enforcement Policy) will explain how the Porter-Cologne Water Quality Control Act mandates and authorities, delegated to the SWRCB and the RWQCBs, will be used to implement and enforce the NPS Program Plan. These authorities include waste discharge requirements (WDRs), waivers of WDRs, and basin plan prohibitions. This policy will also provide a bridge between the NPS Program Plan and the *SWRCB Water Quality Enforcement Policy* adopted by the SWRCB in 2002. The information being developed will assist all responsible and/or interested parties in understanding how the state's NPS water quality control requirements will be implemented and/or enforced. The parties involved include the SWRCB and the RWQCBs, federal, state and local agencies, dischargers, designated third-party participants and any other interested public and private parties.

2. Water Quality Monitoring for NPS Program Effectiveness

In coordination with the California Department of Fish and Game (CDFG), the SWRCB through the Surface Water Ambient Monitoring Program (SWAMP), CCC, the RWQCBs, and the U. S. Environmental Protection Agency (U.S.EPA) are developing a monitoring approach designed to evaluate the effectiveness of the NPS Program. The NPS Monitoring Program is being designed to address a series of management questions that need to be answered to provide improved implementation of the NPS Program. These six questions are:

(a) *What is the quality of water in California?* Provide information to indicate the extent and location of water quality impairments, threatened water bodies, and high quality waters.
(b) *What is the extent of impairments associated with nonpoint sources?* Provide information that indicates the extent and location of impairments associated with nonpoint sources vs. point sources.
(c) *What are the nonpoint sources that are impairing or threatening water quality?* Provide information as to the pollutants or stressors associated with the impairments or threats to water quality and the related land use activities.
(d) Is water quality getting better or worse? Provide information to determine temporal and spatial (e.g., land use category) trends in impairment of water quality for nonpoint sources vs. point sources.
(e) Is the NPS Program investing resources consistent with water quality problems? Provide information with respect to the location and extent of expended resources with respect to threatened and impaired water bodies and implementation of MMs and MPs.

(f) Are NPS investments effective in protecting and restoring water quality? Provide information with respect to water quality improvements resulting from investments in specific MM/MP implementation activities.

To date, these coordination efforts have focused on expanding the U.S.EPA's Environmental Monitoring and Assessment Program (EMAP) in California. The EMAP expansion, known as the California Monitoring and Assessment Program (CMAP) will begin in 2004 and is being designed to provide answers to some of the NPS monitoring questions. These coordination activities will also be integrated with consulting efforts with Tetra Tech Consultants (under contract with U.S.EPA through the CWA section 319 grant program) to develop an overall monitoring strategy for the NPS Program.

3. The Interagency Coordinating Committee (IACC)

The IACC is referenced throughout this document, and refers to a group of 28 different state agencies that work together to protect water quality from NPS pollution. The IACC developed the NPS Implementation Plan Objectives, the NPS Category Objectives through NPS land use subcommittees, and worked collaboratively for many months to produce the activity listings that are provided in this document. The IACC will continue to utilize the products that resulted from that effort and to promote collaborative processes in their program implementation. The primary duties of the IACC organization are to: (a) improve interagency coordination and to promote statewide consistency in NPS Programs; (b) promote a watershed approach in addressing NPS pollution; and (c) provide a forum for resolving policy and programmatic conflicts among State agencies involved in NPS pollution control.

4. Statewide Watershed Management Activities

The California Environmental Protection Agency (Cal/EPA) and the California Resources Agency (Cal/RA) recently developed a *Watershed Management Strategic Plan* (WMSP) (August 2003). The WMSP was developed pursuant to recommendations in *a Report to the Legislature, (as required by Assembly Bill 2117, Chapter 735, Statutes of 2000)*. The WMSP is guided by a Steering Committee with representatives from the key State agencies, and although broader in scope with respect to water management issues, it will certainly enhance implementation of the NPS Program.

In a separate effort, Cal/EPA and Cal/RA are parties to a memorandum of understanding (MOU) intended to improve integration and coordination of watershed policies, funding, and program implementation. Another product of the MOU is the California Watershed Council (CWC) which will serve in an advisory capacity to the secretaries of the Cal/EPA and Cal/RA. The first meeting of the CWC was held on August 28, 2003, and was attended by numerous representatives of both public and private stakeholders.

5. SWRCB NPS Related Funding Programs

The SWRCB has an extensive funding program related to NPS pollution control. The NPS Program provides the framework through NPS Program Plan from which project proponents for this funding can design their respective programs. These funding programs are managed by (or in part by) the SWRCB through the Division of Financial Assistance (DFA) and include the following:

- Proposition 13: Costa-Machado Water Act of 2000 (Proposition 13) - NPS Pollution Control Program;
- Proposition 13: Coastal NPS Pollution Control Program;
- Proposition 13: CALFED Drinking Water Quality Program;
- Proposition 40: Watershed, Clean Beaches, and Water Quality Act
- Proposition 50: 2002 Water Bond Law - CALFED Drinking Water Quality Program;
- CWA section 319(h) - NPS Implementation Program; and
- State Revolving Fund Loan Program.

Many of these programs have specific set-asides for expenditures in the areas of watershed management and NPS pollution prevention. Additionally, there is a significant effort in DFA to streamline and improve the grant process to ensure effective and timely distribution of bond funds and so that the best, most cost-effective projects are selected.

6. SWRCB Total Maximum Daily Load Program

Section 303(d)(1)(C) of the CWA requires the State to establish TMDLs for "303(d) listed water bodies" for those pollutants, from both point and nonpoint sources, determined by U.S. EPA to be suitable for TMDL measurement. The 2002 list, which is the most current approved list for California, requires the development of plans for addressing impaired waters in over 1,800 waterbody/pollutant combinations. (Note: One waterbody can be listed for numerous pollutants.) The TMDL program provides an assessment and planning framework for identifying load reductions or other actions needed to attain water quality standards.

The planning process for TMDL development is divided into two parts. Part 1 establishes and apportions the allowable level(s) of pollution in the water body (or watershed) necessary to achieve water quality standards. The recommended methods for achieving the necessary reductions in pollutant loadings are detailed in the second part of this process--the TMDL implementation plan. The implementation plan must include: (1) a description of the nature of the actions necessary to achieve the water quality objectives, including recommendations for appropriate action by any entity, public or private; (2) a time schedule for the actions to be taken; and (3) a description of the monitoring and surveillance to be undertaken to determine compliance with the objectives.

To date 19 TMDLs have gone through the full approval process including approval by U. S. EPA and 132 are at various stages of development or approval at the RWQCBs or the SWRCB. During the five-year period of the NPS Implementation Plan, Regional Boards project completing 60 to 80 TMDLs. Because individual TMDLs are developed to address multiple waterbody/pollutant combinations, it is proposed that by 2008 nearly all of the over 1800 listings will have TMDLs either completed or in some stage of development.

In summary, TMDLs are a planning effort that will enhance the State's ability to foster implementation of appropriate NPS MMs and MPs. By providing watershed-specific information, TMDLs will help target specific sources and corresponding corrective measures and will provide a framework for using more stringent approaches that may be necessary to achieve water quality goals and maintain beneficial uses.

D. DOCUMENT ORGANIZATION

The NPS Implementation Plan activities for each category are listed in subsequent sections of this document (Sections I through VIII). These address the six land use categories of agriculture; forestry; urban; marinas and recreational boating; hydromodification, and wetlands. An additional category is also provided ("Other") for those activities related to sources of NPS pollution not covered by the traditional land use categories (e.g., abandoned mines). In addition, there are many activities that are being implemented by State agencies that address all MMs in all or multiple land use categories, and that provide an overall framework for NPS pollution prevention. These activities are provided in Section I, 'Multiple Land Use Activities'.

These following sections include a discussion that lists the MMs for the category, describes the issues of concern, clarifies their relationship to other State programs, summarizes the NPS Category Objectives, and lists each agencies' activities. The tabular presentation of category activities is a description of agency activities from all 28 agencies that participate in the State NPS Program. The activities in these tables are organized by MM and by NPS Program process element.

As a point of clarification for these activity tables, four of the NPS Program Process Elements, 'Assess', 'Plan', 'Target' and 'Coordinate', have been regrouped into the 'Pre-Implementation' designation for the purposes of this activity listing. Other identified process elements include 'Implement', and 'Track/Monitor', as a logical follow-up to all 'Pre-Implementation' processes.

It is also important to note that these activity listings are the result of 28 different State agencies' "best guess" in terms of what their NPS programs may or may not be able to implement over the next five years. All IACC members that participated in the NPS Implementation Plan development expressed a concern regarding the current fiscal crisis in California. With diminishing resources, programs are being cut and may sustain additional cuts in future years. As such, it is necessary to provide here the disclaimer that all NPS

Program activities can only be implemented as long as staff and resources remain available at their current levels.

Nonetheless, there are 15 major tasks, which are a high a priority for effective implementation of the NPS Program. These tasks are primarily the responsibility of the NPS Programs lead agencies – the SWRCB and CCC. The focus on implementation tracking and reporting to U.S. EPA and the National Oceanic and Atmospheric Administration (NOAA) will begin with these 15 activities when program assessments take place. These tasks are provided in the Table IO-1 below.

Table 1. Summary of Major Task That the NPS Program Lead Agencies Seek to Complete as of 2008

Activity Number	Activity Description	Anticipated Completion Date	Land Use Category	Responsible Agency
1	Adapt the Western EMAP Monitoring Project to meet California's NPS Program information needs through the SWAMP.	December 2004	Forestry, Urban, Agriculture	SWRCB
2	Through contract with California State Lands Commission (SLC) and California Department of Parks and Recreation (CDPR) assess and identify State-owned or managed properties that will require NPS implementation efforts.	July 2004	All	SWRCB, DPR, SLC
3	Coordinate with RWQCB5 irrigated agriculture waiver program as a pilot program for implementation of management practices and tracking of MP and monitoring data.	January 2006	Agriculture	SWRCB, RWQCB5
4	Develop a plan to coordinate with federal agencies in NPS Program implementation through the IACC or other effective means	July 2004	All	SWRCB, CCC
5	Develop a plan to coordinate with local agencies in NPS Program implementation through the IACC or other effective means	July 2004	All	SWRCB, CCC
6	Develop a technical assistance manual with guidelines for designing projects to avoid wetlands and riparian areas.	December 2004	Wetlands	SWRCB
7	Establish consistent compliance monitoring criteria for compensatory wetland mitigation projects.	May 2005	Wetlands	SWRCB
8	Establish regional standards for minimum number of sewage disposal facilities per recreational vessel.	June 2008	Marinas and Recreational Boating	SWRCB, RWQCB2, RWQCB4, RWQCB8
9	Complete statewide marinas mapping project to identify environmental services for boaters as a prelude to a needs assessment.	June 2008	Marinas and Recreational Boating	CCC
10	Provide web-based condensed quick reference guide that provides an entry point to information on nonpoint sources in California (NPS Encyclopedia)	December 2003	All	SWRCB
11	Provide an on-line NPS database system that provides a quick reference guide to available MP technologies, effectiveness of techniques in terms of pollutant removal, and a range of expected installation and maintenance costs. (MP Miner)	September 2004	All	SWRCB

Activity Number	Activity Description	Anticipated Completion Date	Land Use Category	Responsible Agency
12	Conduct a geographical evaluation on the MM/MP implementation that has occurred in California and develop a mechanism to continue to monitor and report on this implementation.	June 2008	All	SWRCB
13	Develop a mechanism for transposing water quality assessment information with MM/MP implementation to understand NPS Program effectiveness.	June 2008	All	SWRCB
14	Complete biennial progress reports to U.S.EPA and NOAA, as well as other agencies and the public regarding progress in NPS Program implementation.	December 2005 and December 2007	All	SWRCB, CCC
15	Submit to the Legislature and make available to the public, copies of and a summary of information in all SWRCB and RWQCB reports that contain information related to NPS pollution and that the SWRCB or RWQCB are required to prepare in the previous fiscal year pursuant to CWA sections 303, 305(b), 319 and CZARA section 6217.	August 2003 and annually thereafter	All	SWRCB, CCC, RWQCBs